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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,763	04/13/2004	Robert Podoloff	438 US	2836
20346	7590	12/28/2005	EXAMINER	
KEY SAFETY SYSTEMS, INC. PATENT DEPARTMENT 5300 ALLEN K BREED HIGHWAY LAKELAND, FL 33811-1130			HOANG, TU BA	
			ART UNIT	PAPER NUMBER
			2832	

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No. 10/822,763	Applicant(s) PODOLOFF ET AL.	
	Examiner Tu Ba Hoang	Art Unit 2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 10-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>07/02/04&05/16/05</u> | 6) <input type="checkbox"/> Other: _____ |

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Election/Restrictions

Applicant's election without traverse of invention I, claims 1-9 in the reply filed on October 10, 2005 is acknowledged.

Claims 10-28 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions/ species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply set forth above. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Objections

Claims 5 and 8 are objected to because of the following informalities: In claim 5, the term "comprise" recited at line 2 should be replaced with "comprises and In claim 8, the phrase "comprises a flexible film substrate" recited at lines 2-3 should be replaced with "comprise flexible film substrates". Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-7, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Francis (US 4,332,081). Francis shows a thick film thermistor comprising a pair of shaped electrical conductors 21,24 deposited on a first support substrate 40 (shown in Figures 2 and 4), at least a temperature sensitive ink layer or film 28 (or 20 shown in Figure 1) deposited over the pair of electrical conductors 21,24 so that the ink layer 28 is coextensive with the pair of electrical conductors 21,24, and a second support substrate 44 (shown in Figure 4) bonded to the first support substrate 40, wherein the temperature sensitive ink layer comprises a high temperature, carbon-free temperature sensing ink layer, a high temperature ink binder (i.e., silica), intrinsically semi-conductive particles, conductive particles including a conductive metal oxide compound based on an oxygen value of two (see column 3, line 68 to column 4, line 4, i.e., ruthenium oxide, manganese oxide, copper compounds, zinc oxide, lead oxide, etc), the pair of shaped electrical conductors 21,24 comprises deposited shaped, silver based conductive ink patterns (column 4, lines 4-6, i.e., platinum silver) with each conductor .is shaped in an interdigitated manner with the other conductor (as shown at least by Figure 2 or 4) with the resistance value of the thermistor is inherently determined by a surface area of the pair of shaped electrical conductors 21,24 and a resistivity or resistance of the temperature sensitive ink layer (i.e. temperature coefficient of resistance, column 3, lines 57-61) and the conductors 21,24 can be connected to resistance measuring circuitry for temperature compensation if so desired (as shown in Figure 3 and in the abstract).

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Francis. Francis discloses substantially all features of the claimed invention as previously set forth above except for the temperature sensitive ink layer comprises conductive particles having a mixture of conductive tin oxide particles and Fe₃O₄ iron oxide particles, and dielectric particles and the support substrates are flexible film substrates. The use of conductive particles including mixture of conductive tin oxide particles and Fe₃O₄ iron oxide particles, and dielectric particles would be considered as choices for material depend upon the typical temperature sensitive coefficient of resistance and the support substrates could be flexible film substrates if so desired would have been within the purview of obviousness to one having ordinary skill in the art.

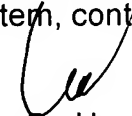
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Kazmierowicz (US 3,932,312), Davis et al (US 4,041,440), Chen et al (US 3,748,174), and Agrawal et al (US 6,317,248).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Ba Hoang whose telephone number is (571) 272-4780. The examiner can normally be reached on Mon-fri from 8:30AM to 6:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tu Ba Hoang
Primary Examiner
Art Unit 2832

December 12, 2005